

**U.S. DEPARTMENT OF COMMERCE
National Technical Information Service**

PB-256 362

Questions and Answers on Water Quality Standards

Environmental Protection Agency

September 1971

236047

PB 256 362

002253

ENVIRONMENTAL PROTECTION AGENCY
Office of Water Programs

QUESTIONS AND ANSWERS ON WATER QUALITY STANDARDS

Division of Water Quality Standards
Washington, D. C.
September 1971

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

BIBLIOGRAPHIC DATA SHEET	1. Report No.	2.	3. Recipient's Accession No. PB-256 362
	4. Title and Subtitle Questions and Answers on Water Quality Standards		5. Report Date Sep 71
7. Author(s)		8. Performing Organization Rept. No.	
9. Performing Organization Name and Address Environmental Protection Agency Washington, D. C. Div. of Water Quality Standards		10. Project/Task/Work Unit No.	
12. Sponsoring Organization Name and Address		11. Contract/Grant No.	
		13. Type of Report & Period Covered	
		14.	
15. Supplementary Notes			
16. Abstracts The water quality standards program is directed by the Environmental Protection Agency, an independent regulatory agency which has responsibility for approving State-adopted standards, evaluating adherence to the standards, and overseeing enforcement of standards compliance. Standards, the first nationwide strategy for water quality management, contain four major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the interstate water; criteria to protect those uses; implementation plans (for needed industrial-municipal waste treatment improvements) and enforcement plans; and an antidegradation statement to protect existing high quality waters. Minimum water quality criteria, or numerical specifications of physical, chemical, temperature, and biological levels, are stated.			
17. Key Words and Document Analysis. 17a. Descriptors *Water quality management, *Questionnaires, Standards, Wildlife, Law enforcement, Recreation, Physical properties, Industries, Chemical properties, Agriculture. Bacteria, Potable water, Fishes, 17b. Identifiers/Open-Ended Terms *Water quality standards.			
17c. COSATI Field Group 13 B		21. No. of Pages 22p	
18. Availability Statement National Technical Information Service Springfield, Virginia 22161		19. Security Class (This Report) UNCLASSIFIED	20. Security Class (This Page) UNCLASSIFIED
		22. Price 3.50/2.25	

The water quality standards program is directed by the Environmental Protection Agency, an independent regulatory agency which has responsibility for approving State-adopted standards, evaluating adherence to the standards, and overseeing enforcement of standards compliance.

Standards, the first nationwide strategy for water quality management, contain four major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the interstate water; criteria to protect those uses; implementation plans (for needed industrial-municipal waste treatment improvements) and enforcement plans; and an antidegradation statement to protect existing high quality waters.

Minimum water quality criteria, or numerical specifications of physical, chemical, temperature, and biological levels, are stated in the National Technical Advisory Committee report to the Secretary of the Interior, Water Quality Criteria, dated April 1, 1968, and published by the Government Printing Office, Washington, D. C. Unavailability of the NTAC report before June 30, 1967--the date set by the Water Quality Act of 1965 for formal adoption of State standards--resulted in significant variations between the State-adopted and the NTAC minimum criteria. Some standards were adopted and approved before the NTAC report became available.

The Water Quality Criteria report is presently being updated in light of new scientific and technical information, with schedule publication in June 1972. These criteria compilations are issued to provide information to the public on water quality standards. As further information becomes available, they will be updated.

Water quality standards are subject to change when justified by newly available technical and scientific information. For the latest information refer to the existing approved water quality standards which can be obtained from the individual State water pollution control agency or EPA regional office, listed below.

Reproduced from
best available copy.

QUESTIONS AND ANSWERS ON WATER QUALITY STANDARDS**1. When did the water quality standards program begin?**

The water quality standards program was provided for in the Water Quality Act of 1965, which was passed unanimously by Congress. This Act is part of the Federal Water Pollution Control Act, as amended (33 U.S.C. 466 et seq.).

2. Who administers the water quality standards program?

Since December 2, 1970, administration of the program has been assigned to the Division of Water Quality Standards, Water Quality Office, Environmental Protection Agency. Prior to that date, the Federal Water Quality Administration, U. S. Department of the Interior administered the program succeeding HEW.

3. How many States, territories, or possessions are included in the water quality standards program?

All fifty States plus the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

4. What did the law require States to do in order to establish standards?

First, the Governor or water pollution control agency had to file, by October 2, 1966, a letter of intent that the State, after public hearings, would, before June 30, 1967, adopt (a) water quality criteria applicable to interstate waters or portions thereof within the State, and (b) a plan for the implementation and enforcement of the criteria. Second, the State had to adopt such criteria and plans and submit them to the Secretary of the Interior for approval.

5. Who actually sets the standards?

The States, through public hearings, set stream classifications and appropriate criteria to meet those classifications. After adoption by the State, they were submitted to the Federal Government for approval.

6. Are water quality standards approved for all States?

Yes. Standards have been approved wholly or in part for all 54 jurisdictions covered by the law. The standards for some States were approved with exceptions. These are in the process of being resolved.

7. What items comprise water quality standards?

Water quality standards are comprised of numerical and narrative criteria applied to specific stream uses or classifications, and a plan for implementation and enforcement.

8. Exactly what are stream classifications, criteria, and plans?

A) Stream classifications include the use to be made of a particular stretch of a river, lake, or coastal water, such as recreation, drinking water, industrial use, agricultural use, fish and wildlife propagation, or a combination of these uses.

B) The numerical criteria are scientific determinations of the specific characteristics or criteria which would permit the appropriate uses agreed on by the State and the Federal Government. Limits on such pollutants as bacteria, toxic materials, and taste- and odor-producing substances in the water are set by the standards.

C) Implementation plans are a step by step plan specifying what actions are to be taken by polluters to enable them to meet Federal-State standards by a certain date.

D) Enforcement plans, as the name implies, describe what action will be taken if standards are not complied with.

9. Are all criteria given in numerical form?

No. Some criteria are narrative; where possible, numerical standards are used.

10. Do water quality standards apply to all waters?

No. Federal-State standards exist only for interstate waters.

11. Are there any standards for intrastate waters?

Yes. All but two States have adopted standards for intrastate waters (Georgia and Wyoming). California, Pennsylvania and Tennessee have partially adopted such standards.

12. What are interstate waters?

The term "interstate waters," as defined in Section 23(e) of the Federal Water Pollution Control Act, means all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters, and waters forming part of an international boundary. Water quality standards are to be established for and made applicable to the entire stretch of the interstate stream within a State.

13. Are tributaries to interstate streams included?

Tributaries of interstate waters, which are not in themselves interstate waters, are not subject to water quality standards. However, the discharge of any matter into such tributaries which reach interstate waters and reduces the quality of such interstate waters below the established water quality standards is subject to abatement under the law.

14. Are standards for similar stream uses comparable throughout the United States?

Yes.

15. Can water quality standards for streams differ within the same State?

Yes. Water quality standards vary within the State depending upon the use to be made of the receiving water. Water quality standards may also vary on each stream depending on the use to be made of each section of the stream.

16. Is the purpose of water quality standards to return all waters to their pristine state?

No. The purpose of the water quality standards program is to protect the public health or welfare and enhance the quality of water in line with the uses to be made of the stream in question.

17. Can high quality waters, i.e. waters not yet polluted, be permitted to deteriorate as long as approved water quality standards are met?

No. An antidegradation provision in standards prohibits the deterioration of high quality waters.

18. Do all States have an antidegradation provision in their standards?

No. August 1971, 45 states have approved antidegradation statements. Eventually, all States are expected to have such a statement.

19. Why is the propagation of fish and wildlife used as a basic guide in improving water quality?

Waters sufficient to provide for the propagation of fish and wildlife are suitable for all human uses except public drinking water.

20. What kind of characteristics are covered by the water quality criteria?

Standards include criteria for the physical and microbiological properties of water, inorganic chemicals, organic chemicals, and radioactivity.

21. Where is information available on the approval status of the standards for each State, and what the exceptions are, if any?

This question can be answered by either the State water pollution control agency or the Environmental Protection Agency through its Regional Offices or at its Washington, D. C. headquarters.

22. Are copies of the water quality standards for each State available?

Yes, Copies are available from each State's water pollution control agency.

23. When must every discharger comply with water quality standards?

Each State has established its own final compliance date. Most of these dates are prior to 1975.

24. Can the Environmental Protection Agency disapprove standards legally adopted by a State?

Yes.

25. What happens to the standards if they are disapproved?

If the Administrator of EPA finds some standards adopted by a State unacceptable or that none have been set by a State for an interstate stream, he may, under the law, prepare new or revised standards after giving reasonable notice of his intention. If the State does not submit acceptable standards within six months or petition for a public hearing, the Administrator may put these standards into effect.

26. What happens if the State petitions for a public hearing?

The Administrator must call a hearing before a five-member board. If the hearing board approves the standards established by the Administrator, the standards go into effect upon receipt of the board's recommendation. If the board recommends modification of the standards, the Administrator is required to issue revised standards in line with the board's recommendations.

27. Once adopted by the States and approved by the Federal government, may standards be modified or revised?

Yes.

28. Who can initiate revisions or modifications?

Either at the request of the Governor or on his own initiative, the Administrator is empowered to take steps for the revision of standards.

29. How likely is it that standards will be revised?

With continued advances in the science and technology of water pollution control, it is expected that many of the water quality standards approved as of now will be improved from time to time in the years ahead in order to meet mounting demands for clean water for necessary and desirable use. Standards will also be upgraded as increased knowledge and improved analytical techniques become available.

30. If standards might be revised, what is the use of investing money to meet today's standards and running the risk of still additional future investment?

One of the costs of doing business is keeping pace with advances in technology and changes in the market place. As water quality technology changes and the public continues to demand cleaner water, all current and future requirements will have to be met. One of the chief causes of the dilemma we are in today is that we failed to take early action to control or prevent pollution. Delay today simply means added problems for tomorrow.

31. What does the Environmental Protection Agency use to determine the acceptability of standards?

The basis for such judgment are the recommendations made by the National Technical Advisory Committee in its report to the Secretary of the Interior on Water Quality Criteria, April 1, 1968.

32. Is a copy of this report available?

Yes, from the Government Printing Office at \$3.00 a copy.

33. Are there any exceptions to the guidelines established by the National Technical Advisory Committee?

Yes. Standards may be lower than recommended levels if it can be proven that the stream in its natural state has such lower criteria.

34. Are the NTAC criteria scientifically sound and are they out of date?

They are scientifically sound, although, as with all specific measures they are subject to debate. At the present time, they are the best measures available. They will be reviewed in mid-1971.

35. What is done to ensure that standards are met?

Each State has a surveillance or monitoring system to verify compliance with standards.

36. What type enforcement actions can be taken by States?

Enforcement methods available to enforce water quality standards are requiring permits, issuing specific orders for a polluter to take certain action by a prescribed date, public hearings, cease and desist orders, and finally court action.

37. Can the Federal Government enforce standards?

Yes. Once standards submitted by the States are approved, they become Federal-State standards and are subject to Federal enforcement action. However, the initial responsibility for enforcement of standards rests with the States. If the State fails to exercise this responsibility, the Administrator of EPA may act. If the standards are being violated, he is empowered, after notice and a wait of 180 days, to refer the matter directly to the Department of Justice for filing of a court suit.

38. What sources of pollution are included in implementation plans?

Pollution problems associated with municipal and industrial wastes are included in all plans. Pollution originating from combined sewers, vessels and marinas, agricultural wastes, dredging, pesticides, acid mine drainage, and other sources are included in varying degrees.

39. What are the basic causes of pollution?

The causes of water pollution fall into two broad categories--untreated or inadequately treated wastes from easily identified, point-of-origin sources such as municipal waste treatment discharges, and waste from diffuse or non-point sources--silt or fertilizers washed into a stream during a heavy rain, for example.

40. What is a "mixing zone" that is called for in some standards?

A mixing zone is a limited area in a receiving stream where water quality is permitted to be lower than that prescribed by the standards. Its function is to provide a restricted area where wastes can become assimilated by the water.

41. Who is going to have to pay for cleaning up the water?

We all will, as corporations, taxpayers, and as consumers. Pollution control is a complex, expensive, and time-consuming process.

42. Is the U. S. Army Corps of Engineer permit program part of water quality standards?

No, although compliance with water quality standards will be considered in granting a permit for dumping waste into streams.

43. What is the basis of the permit program.

The Refuse Act of 1899.

44. Why didn't the Federal Government use this act before in controlling pollution.

This method wasn't available to the Federal Government until the courts recently construed the wording of the law to cover pollution.

45. What is the difference between water quality standards and effluent standards?

Water quality standards apply to the natural aquatic environment of a stream while effluent criteria apply directly to the characteristics of wastes at the point of discharge into the stream.

46. When will effluent standards be introduced?

Criteria for industry wide effluent standards are being developed in 1971 in anticipation that Congress will amend the law and give authority to the Federal Government to legally adopt such standards.

47. Are there standards for ground waters and navigable waters?

No. These may be expected to be developed in the future when the necessary legislation is passed by Congress.

48. When is our water going to be cleaned up?

No polluted rivers or lakes are going to be cleaned up overnight as a result of the standards program. For some forms of pollution, the standards program is expected to produce cleaner water in three to five years. The more difficult situations will take longer, perhaps up to a decade.

49. Has the water quality standards resulted in any meaningful achievements towards the goal of cleaner water?

The standards program, coupled with the expanded Federal grants program for waste treatment construction, has provided a powerful stimulus to the construction or expansion of municipal waste treatment plants. The requirements of the standards program have accelerated the industrial trend of including pollution control as a legitimate and regular part of the cost of production. Efforts are being intensified to prevent or control pollution from diffuse, non-point sources.

50. Can we really ever expect to get cleaner water?

Yes, but we are paying the price now for our lack of public concern of previous years.

ENVIRONMENTAL PROTECTION AGENCY
WATER QUALITY OFFICE
Washington, D.C.
20242

STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

January 1971

Alabama 205 269-7632
Arthur N. Beck, Technical Secretary
Water Improvement Commission
State Office Building
Montgomery, Alabama 36104

Alaska 907 586-5373
James A. Anderegg, Director
Div. of Environmental Health
Department of Health & Welfare, Pouch H
Juneau, Alaska 99801

Arizona 602 271-5457
Edmund C. Garthe, Asst. Comm.
Dir. Health Serv., Dept. of Health
Hayden Plaza West
4019 North 33rd Avenue
Phoenix, Arizona 85017

Arkansas 501 371-1701
S. L. Davies, Director
Arkansas Pollution Control Comm.
1100 Harrington Avenue
Little Rock, Arkansas 72202

California 916 445-3993
Kerry W. Mulligan, Chairman
State Water Resources Control Board
1416 Ninth Street, Room 1140
Sacramento, California 95814

Colorado 303 388-6111, x 231
Frank Rozich, Director
Water Pollution Control Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Connecticut 203 566-2793
John J. Curry, Director
State Water Resources Commission
State Office Building, Room 225
Hartford, Connecticut 06115

Delaware 302 734-5711
John C. Bryson, Dir. x470-471
Div. of Environmental Control
Dept. of Natural Resources & Env. Control
Loockerman St. and Legislative Ave.
Dover, Delaware 19901

District of Columbia 202 629-3105
Malcolm Hope, Associate Director
for Environmental Health
District of Columbia Department of
Public Health
1875 Connecticut Avenue, N.W.
Washington, D.C. 20009

Florida 904 224-9151
Vincent D. Patton, Executive Director
Department of Air & Water Pollution
Control
Tallahassee Bank Building
315 South Calhoun Street, Suite 300
Tallahassee, Florida 32301

Georgia 404 688-4033 x427
R. S. Howard, Jr., Exec. Sec.
State Water Quality Control Board
47 Trinity Avenue, S.W., Room 609
Atlanta, Georgia 30334

TA AND INTERSTATE WPC ADMINISTRATORS (Cont'd.)Guam 425-143

O. V. Natarajan, Ph.D.
 Administrator, Water Pollution
 Control Commission
 Public Health and Social Services
 Government of Guam
 P.O. Box 2816
 Agaña, Guam 96910

Hawaii 808 548-2811

Shinji Soneda, Executive Officer
 Environmental Health Division
 Hawaii Dept. of Health
 P.O. Box 3378
 Honolulu, Hawaii 96801

Idaho 208 384-2390

Vaughn Anderson, Director
 Engineering & Sanitation Div.
 Idaho Dept. of Health
 State House
 Boise, Idaho 83707

Illinois 217 525-3397

C. W. Klassen, Director
 Ill. Environmental Protection Agency
 2200 Churchill Road
 Springfield, Illinois 62706

Mr. David Currie 312 793-3620
 Chairman, Illinois Pollution Control Bd.
 189 W. Madison Street
 Suite 900
 Chicago, Illinois 60602

Indiana 317 633-4420

Mr. Perry Miller
 Stream Pollution Control Board
 1330 West Michigan Street
 Indianapolis, Indiana 46206

Iowa 515 281-5345

R. J. Schliekelman, Technical Sec.
 Iowa Water Pollution Control Comm.
 Iowa State Department of Health
 Des Moines, Iowa 50319

Kansas 913 296-3821

Melville W. Gray
 Chief Engineer and Director
 Division of Environmental Health
 Kansas State Department of Health
 Topeka, Kansas 66612

Kentucky 502 564-3770

Ralph C. Pickard, Executive Director
 Kentucky Water Pollution Control Comm.
 275 East Main Street
 Frankfort, Kentucky 40601

Louisiana 504 389-5309

R. A. Lafleur, Executive Secretary
 Louisiana Stream Control Commission
 P.O. Drawer FC, University Station
 Baton Rouge, Louisiana 70803

Maine 207 289-2591

William R. Adams, Director
 Environmental Improvement Commission
 State House
 Augusta, Maine 04330

Maryland 301 383-3010 x8428

Howard E. Chaney, Acting Director
 Environmental Health Services
 State Department of Health
 and Mental Hygiene
 2305 N. Charles Street
 Baltimore, Maryland 21218
 AND 301 268-3371 x250
 Paul W. McKee, Director
 State Department of Water Resources
 State Office Building
 Annapolis, Maryland 21401

Massachusetts 617 727-3855

Thomas C. McMahon, Director
 Division of Water Pollution Control
 Department of Natural Resources
 Leverett Saltonstall Bldg., Government
 Center
 100 Cambridge Street
 Boston, Massachusetts 02202

//

STATE AND INTERSTATE WPC ADMINISTRATORS (Cont'd.)

Michigan 517 373-3560
Ralph W. Purdy, Executive Secretary
Water Resources Commission
Stevens T. Mason Building
Lansing, Michigan 48926

Minnesota 612 378-1320
John P. Badalich, Exec. Dir x360
Minnesota Pollution Control Agency
717 Delaware Street, SE.
Minneapolis, Minnesota 55440

Mississippi 601 354-6783
Glen Wood, Jr., Acting Exec. Sec.
Mississippi Air and Water Pollution
Control Commission
P.O. Box 827
Jackson, Mississippi 39205

Missouri 314 635-9117
Jack K. Smith
Executive Secretary
Missouri Water Pollution Board
O. Box 154
Jefferson City, Missouri 65101

Montana 406 449-2407
Claiborne W. Brinck, Secretary
Montana Water Pollution Control Council
Dir., Div. of Environmental Sanitation
Montana State Dept. of Health
Helena, Montana 59601

Nebraska 402 473-1484
T. A. Filipi, Executive Secretary
Neb. Water Pollution Control Council
State Department of Health
State House Station, Box 94757
Lincoln, Nebraska 68509

Nevada 702 882-7458
John H. Carr, M.D.
State Health Officer
Dept. of Health, Welfare & Rehab.
Nye Bldg., 201 South Fall Street
Carson City, Nevada 89701

New Hampshire 603 271-3502
William A. Healy, Exec. Secy.
Water Supply & Pollution Control Comm.
Prescott Park
105 Loudon Road
Concord, New Hampshire 03301

New Jersey 609 292-5383
Richard J. Sullivan, Commissioner
Department of Environmental Protection
P.O. Box 1540
Trenton, New Jersey 08625

New Mexico 505 827-2371
John G. Jasper, Chairman
New Mexico Water Quality Control Comm.
New Mexico Health & Social Service Dept.
P.O. Box 2348
Santa Fe, New Mexico 89501

New York 518 474-2934
Dwight F. Metzler, Deputy Commissioner
for Environmental Quality
Dept. of Environmental Conservation
Albany, New York 12201

North Carolina 919 829-3006
Earle C. Hubbard, Assistant Director
Dept. of Water and Air Resources
P.O. Box 27048
Raleigh, North Carolina 27611

North Dakota
W. Van Heuvelen, Chief
Environmental Health & Engineering Services
North Dakota State Department of Health
Bismarck, North Dakota 58501

Ohio 614 469-2253
Dr. E. W. Arnold, Chairman
Water Pollution Control Board
State Department of Health
P.O. Box 118
Columbus, Ohio 43216

Oklahoma 405 427-2955
Lloyd F. Pummill, Chief
Environmental Health Services
State Department of Health
3400 North Eastern Avenue
Oklahoma City, Oklahoma 73105

STATE & INTERSTATE WPC ADMINISTRATORS (Cont'd.)

Oregon 503, 226-2161
Kenneth H. Spies, Director X228
Department of Environmental Quality
P. O. Box 231
Portland, Oregon 97207

Pennsylvania 717, 787-2666
Walter A. Lyon, Director
Bureau of Sanitary Engineering
State Department of Health
P. O. Box 90
Harrisburg, Pennsylvania 17120

Puerto Rico 809, 767-2014
Angel Alberto Colon
Asst. Secy. of Health for Environ-
mental Health & Consumer Protection
Institute of Health
Box 1730
Hato Rey, Puerto Rico 00919

Rhode Island 401, 521-7100
Dr. Joseph E. Cannon X231, 2, 3
Director of Health
Rhode Island Dept. of Health
40 Fountain Street
Providence, Rhode Island 02903

South Carolina 803, 758-5416
Dr. Hubert J. Webb, Exec. Director
S. C. Water Pollution Control Authority
J. Marion Simms Building
Columbia, South Carolina 29201

South Dakota 605, 224-3351
Charles E. Carl, Director
Div. of Sanitary Engineering
S. D. State Department of Health
Pierre, South Dakota 57501

Tennessee 615, 741-2275
S. Leary Jones, Exec. Secy.
Tenn. Stream Pollution Control Board
Cordell Hull Building, Room 621
5th Avenue, North
Nashville, Tennessee 37219

Texas 512, GR5-2651
Hugh C. Yantis Jr., Executive Director
Texas Water Quality Board
1108 Lavaca Street
Austin, Texas 78701

Utah 801, 328-6121
Mr. Calvin K. Sudweeks, Exec. Sec.
Water Pollution Committee
Division of Health
Department of Social Services
44 Medical Drive
Salt Lake City, Utah 84113

Vermont 802, 223-2311 X237
Martin Johnson, Commissioner
Department of Water Resources
State Office Building
Montpelier, Vermont 05602

Virginia 703, 770-2241
A. H. Paessler, Executive Secretary
State Water Control Board
P. O. Box 11143
Richmond, Virginia 23230

Virgin Islands 809, 774-1321
Dr. Eric L. O'Neal
Commissioner of Health
Virgin Islands Dept. of Health
Charlotte Amalie
St. Thomas, Virgin Islands 00802

Washington 206 753-2240
John A. Biggs, Director
Washington State Department of Ecology
P. O. Box 329
Olympia, Washington 98501

West Virginia 304, 348-2107
Edgar Henry, Chief
Division of Water Resources
1201 Greenbrier Street
Charleston, West Virginia 25311

STATE & INTERSTATE WPC ADMINISTRATORS (Cont'd)

Wisconsin 608, 226-2747
Thomas Frangos, Administrator
Division of Environmental Protection
Department of Natural Resources
P. O. Box 450
Madison, Wisconsin 53701

Wyoming 307, 777-7513
Arthur E. Williamson, Director
Sanitary Engineering Services
Wyoming Dept. of Health and Social
Services
Division of Health and Medical Services
State Office Building
Cheyenne, Wyoming 82001

INTERSTATE COMMISSIONS

<u>Headquarters Address</u>	<u>Area Code, Telephone</u>	<u>Member States</u>
Col. R. E. Smyser, Jr. (Ret.) Executive Director Bi-State Development Agency Suite 619, Paul Brown Bldg. 818 Olive Street St. Louis, Missouri 63101	314, CE1-1727	Illinois Missouri
Thomas R. Glenn, Jr. Director and Chief Engineer Interstate Sanitation Commission 10 Columbus Circle New York, New York 10019	212, 582-0380	Connecticut New Jersey New York
Robert K. Horton Exec. Director & Chief Engineer Ohio River Valley Water San. Comm. 414 Walnut Street, Room 302 Cincinnati, Ohio 45202	513, 421-1151	Illinois West Virginia Indiana Virginia Kentucky New York Pennsylvania Ohio
Jan F. Wright, Exec. Director Delaware River Basin Commission 25 Scotch Road, P. O. Box 360 Trenton, New Jersey 08603	609, 883-9500	Delaware New Jersey New York Pennsylvania
Robert B. Bond, Executive Director Klamath River Compact Commission P. O. Box 388 Sacramento, California 95802	916, 445-4403	Oregon California
Harold V. Miller, Acting Chairman Tennessee River Basin Water Pollution Control Commission Central Services Building Nashville, Tennessee 37219	615, 741-3011	Kentucky Mississippi Tennessee
Carl J. Johnson, Exec. Director Interstate Commission on the Potomac River Basin Suite 407, Global Bldg. 1025 Vermont Avenue, N. W. Washington, D. C. 20005	202, 393-1978	District of Columbia Maryland Pennsylvania Virginia West Virginia

(CONTINUED)

15

INTERSTATE COMMISSIONS

<u>Headquarters address</u>	<u>Area Code, Telephone</u>	<u>Member States</u>
Alfred E. Peloquin, Exec. Secretary New England Interstate Water Pollution Control Commission 73 Tremont Street Boston, Massachusetts 02108	617, 742-0281	Connecticut Maine Massachusetts New Hampshire New York Rhode Island Vermont

<u>International Commissions</u>	<u>Area Code, Telephone</u>	<u>Member Countries</u>
William A. Bullard, Executive Secretary International Joint Commission 1711 New York Avenue, N. W. Washington, D. C. 20440	202, 347-3733	U.S. Canada
Joseph P. Friedkin United States Commissioner International Boundary & Water Commission United State and Mexico P. O. Box 1859 El Paso, Texas 79950	915, 532-5476	U.S. Mexico

Ad issues: STATE OF CALIFORNIA - REGIONAL WATER QUALITY CONTROL BOARDS

North Coastal Regional Water Quality Control Board (No. 1)
2200 County Court Drive, Suite F
Santa Rosa, California 95403

San Francisco Bay Regional Water Quality Control Board (No. 2)
364 14th Street
Oakland, California 94612

Central Coastal Regional Water Quality Control Board (No. 3)
1108 Garden Street
San Luis Obispo, California 93401

Los Angeles Regional Water Quality Control Board (No. 4)
107 S. Broadway, Room 9026
Los Angeles, California 90012

Central Valley Regional Water Quality Control Board (No. 5)
2424 16th Street
Sacramento, California 95814

Lahontan Regional Water Quality Control Board (No. 6)
407 West Line Street
Bishop, California 93514

Colorado River Basin Regional Water Quality Control Board (No. 7)
81-713 Highway 111, (P. O. Drawer 1)
Indio, California 92201

Santa Ana Regional Water Quality Control Board (No. 8)
6848 Magnolia Avenue
Suite 14
Riverside, California 92506

San Diego Regional Water Quality Control Board (No. 9)
1350 Front Street, Room 2050
San Diego, California 92101

State Water Resources Control Board
Room 1140
Resources Building
1116 Ninth Street
Sacramento, California 95814

LIST OF PERSONS WHO SHOULD ALSO RECEIVE COPIES:

(Note that the addresser are the same as the Administrator's except where noted)

Alaska - Mr. R. A. Hall, Comm., Alaska Department of Health and Welfare

California - Jerome B. Gilbert, Executive Officer

Colorado - Dr. Roy L. Cleere, Executive Director

District of Columbia - Arnold Speiser, Chief, WQC Div.
801 N. Capitol Street, NE.
Washington, D.C.

Iowa - James F. Speers, Commissioner of Public Health

Kansas - Edwin D. Lyman, M.D., M.P., State Director of Health

Nevada - E. G. Gregory, Chief, Bureau of Environmental Health

New Mexico - John R. Wright, Chief, Water & Liquid Waste Section

New York - Paul W. Eastman, P.E., Asst. Comm., Div. of Pure Waters

Rhode Island - Carleton A. Maine, Chief, Div. of Water Pollution Control

South Dakota - Dr. Robert H. Hayes, State Health Officer

Wyoming - Lawrence M. Cohen, M.D., Director of Public Health

Illinois - Thomas Scheuneman, Chief Enforcement Officer
Illinois-Environmental Protection Agency

Mr. Michael G. Schneiderman
Acting Head, Illinois Institute for
Environmental Quality
9th Floor
1189 Madison Street
Chicago, Illinois 60602

Guam - George Ingling, Coordinator of Federal Programs

18

REGIONAL ADMINISTRATORS AND ADDRESSES

- | | | | |
|-----|---|------|---|
| I | John A. S. McGlennon
Room 2303
John F. Kennedy Federal Bldg.
Boston, Mass. 02203
617-223-7210 | VI | Bill McFarland (Acting)
1402 Elm St.
Third Floor
Dallas, Texas 75202
214-749-1962 |
| II | Gerald M. Hansler
Room 847
26 Federal Plaza
New York, New York 10007
212-264-2525 | VII | Jerome H. Svore
911 Walnut Street
Kansas City, Missouri 64106
816-374-5493 |
| III | Ed Furia
6th and Walnut
Curtis Bldg.
Philadelphia, Pennsylvania 19106
215-597-9151 | VIII | John Green
Suite 900
1860 Lincoln Street
Denver, Colorado 80203
303-837-3895 |
| IV | Jack Ravan
Suite 300
1421 Peachtree St., N.W.
Atlanta, Georgia 30309
404-526-5727 | IX | Paul DePalco, Jr.
760 Market Street
San Francisco, Calif. 94102
415-556-4303 |
| V | Francis T. Mayo
1 NW Wacker Drive
Chicago, Illinois 60606
312-353-5250 | X | James Agee
1200 Sixth Avenue
Seattle, Washington 98101
206-442-1200 |